

**Commonwealth of Kentucky  
Division for Air Quality**

**PERMIT APPLICATION SUMMARY FORM**

Completed by: Ben Markin

GENERAL INFORMATION:

Company Name:	East Kentucky Power Cooperative, Inc.
Source Name:	John Sherman Cooper Power Station
Mailing Address:	P.O. Box 707, Winchester, Kentucky 40392-0707
Source Address:	State Highway 1247 South, Burnside, Kentucky
Date application received:	05/03/2004
SIC/Source description:	4911, Electric power generation plant
Source ID #:	21-199-00005
Source A.I. #:	3808
Activity #:	APE20040002
Permit number:	V-05-082

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
__Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input checked="" type="checkbox"/> Operating
<input checked="" type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input checked="" type="checkbox"/> Other - NOx Budget
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☒ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

#### EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
PM	1,925	23,963
PM <sub>10</sub>	451	6,861
SO <sub>2</sub>	24,099	31,331
NO <sub>x</sub>	4,296	13,371
CO	252	412
VOC	31	61
HAP > 10 tpy (HCl, CAS# 7647-01-0)	Not Reported	400

Actual emissions are from the 2005 Emissions Inventory survey report.

#### **SOURCE PROCESS DESCRIPTION:**

The John Sherman Cooper Power Station is an electric power generation plant located on Lake Cumberland, near Burnside in Pulaski County. The station consists of two coal-fired boilers (No. 2 fuel oil is utilized for start-up and stabilization), each supplying steam to a dedicated turbine-generator. Each boiler is a balanced-draft, dry bottom, wall-fired type, utilizing “once through” cooling water. A single-liner chimney handles the combined flue gases from the boilers. Coal is received by truck or rail. A common coal storage and handling system provides crushed coal to the bunkers. There is a common fly ash storage and conveying system. Additionally, there is a common bottom ash storage and handling system and a belt conveyor system that removes the bottom ash from the boilers. The bottom ash is hauled to an on-site depository. Both fly ash and bottom ash are available to be recycled and used in construction materials.

The Standard Industrial Classification (SIC) Code for electric generation is 4911. The source is classified as “major” by Kentucky and federal air permitting programs, 401 KAR 52 and 40 CFR 70, respectively.

There are no significant modifications to the facility for the Title V renewal.

#### **EMISSION AND OPERATING CAPS DESCRIPTION:**

In accordance with 401 KAR 52:020, the maximum operating time for the emergency generator shall not exceed 500 hours in any consecutive twelve (12) –month period.

#### **OPERATIONAL FLEXIBILITY:**

The Permittee has not proposed any alternate operating scenario for any of the emissions units.